## Space settlement paintings depict possible future habitats



The artist Rick Guidice is seen here with one of his paintings, "Double Cylinder Settlement," which he created in 1975, within the exhibit "Rick Guidice: The NASA Paintings" event held at the New Museum in Los Gatos.

A selection of Rick Guidice's space settlement paintings from the History Office Archives Artifacts Collection is currently on exhibit at New Museum Los Gatos in Los Gatos, California until Feb. 14, 2016. The exhibit was produced by the New Museum in Los Gatos' curator Marianne McGrath and Executive Director Lisa Coscino and has attracted the attention of national media including Forbes magazine and National Public Radio's Science Friday program.

The artist and a panel of scientists from NASA Ames were at the museum Sept. 24 for an evening conversation about the future of space settlements and what scientists are working on today to create space habitats and settle the next frontier. The panel answered questions and shared their latest findings with the community. The panelists were: Sid Sun, chief of the Space Biosciences Division; Ann-Sofie Schreurs, NASA Postdoctoral Program (NPP) Fellow; and Lynn D.

Harper, lead of Integrative Studies for the Emerging Commercial Space Office and NASA Ames Space Portal. The moderator was Alexandra Hall, principal, Sodor Space Agency LLC.

In the 1970s, Ames researched the feasibility of setting up orbital space colonies in a series of summer studies, the first being jointly hosted by Ames and Stanford University in 1975, with Princeton University's Gerard K. O'Neil as a participant. In a time before computerized graphic design, the center commissioned paintings when it needed imagery for technical publications, so local artists Rick Guidice and Don Davis were tapped to illustrate the concepts emerging from the studies.

Using acrylic paint and paintbrush, the two men translated highly technical data into fully-developed, highly imaginative visualizations that brought these hypothetical colonies to life. The pair depicted three styles of habitats, along with mining operations and other support infrastructure necessary for building and supplying the settlements. The iconic artwork they created has inspired generations of scientists and engineers.

As a tribute to Los Gatos native Rick Guidice, the New Museum Los Gatos exhibit features 11 of his settlement paintings. Of note are the large, brightly-colored works showing detailed exterior and cutaway views of the Bernal Sphere, O'Neil Cylinder, and Stanford Torus designs.

## Dr. Vernon J. Rossow, aeronautical engineer, passes on

Dr. Vernon J. Rossow's passed away Sept. 21, 2015 at the age of 89. Vernon was a long-time employee of NASA Ames, having joined the Ames Laboratory of the NACA in 1949. He worked for NACA/NASA until his retirement in 2005, then continued to serve as a dedicated Ames Associate until 2014. Including military service during World War II, he amassed 67 years of government service.

During his career, Vernon performed theoretical and experimental research in fluid mechanics and aerodynamics on a wide variety of topics important to NASA and the nation. He published/presented more than 100 reports/papers in technical journals and at national and international conferences.

A major facet of his research was the study of vortical flow—its theoretical prediction and experimental measurement. On this topic alone, Vernon published 60 papers during his career. In particular, he studied the liftgenerated vortical wakes downstream of transport aircraft.

As a leading international authority on this topic, he was invited to write a comprehensive survey on the subject. His 150-page expose entitled "Lift-Generated Vortex Wakes of Subsonic Transport Aircraft," was published in Progress in Aeronautical Sciences in 1999 and has become a de facto reference for researchers in this field.

Vernon is survived by his wife of 67 years, Ruth Ellen (Hartwell) Rossow of Los Altos; their four children, Ellen Bowen of Santa Rosa, Elise Holst of Los Altos, Matthew Rossow of Dos Palos and Heidi Rossow of Exeter; six grandchildren; and 10 great grandchildren.



Dr. Vernon J. Rossow

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